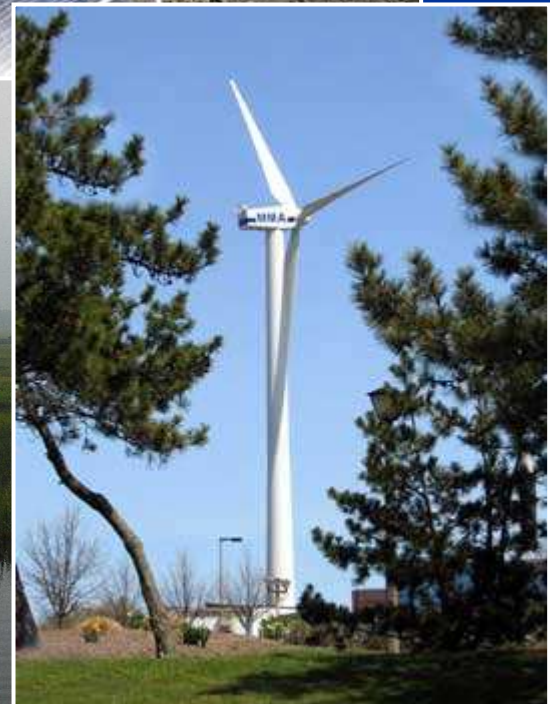


Planning and Zoning Reform – Energy and the Environment



Promote Clean Energy:

- Reduce greenhouse gas emissions and consumption of fossil fuels.
- Maximize energy efficiency and renewable energy opportunities.
- Support energy conservation strategies, local clean power generation, distributed generation technologies, and innovative industries.

Sustainable Development Principles

The Commonwealth of Massachusetts shall care for the built and natural environment by promoting sustainable development through integrated energy and environment, housing and economic development, transportation and other policies, programs, investments, and regulations. The Commonwealth will encourage the coordination and cooperation of all agencies, invest public funds wisely in smart growth and equitable development, give priority to investments that will deliver good jobs and good wages, transit access, housing, and open space, in accordance with the following sustainable development principles. Furthermore, the Commonwealth shall seek to advance these principles in partnership with regional and municipal governments, non-profit organizations, business, and other stakeholders.



1. Concentrate Development and Mix Uses

Support the revitalization of city and town centers and neighborhoods by promoting development that is compact, conserves land, protects historic resources, and integrates uses. Encourage remediation and reuse of existing sites, structures, and infrastructure rather than new construction in undeveloped areas. Create pedestrian friendly districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with open spaces and homes.

2. Advance Equity

Promote equitable sharing of the benefits and burdens of development. Provide technical and strategic support for inclusive community planning and decision making to ensure social, economic, and environmental justice. Ensure that the interests of future generations are not compromised by today's decisions.



3. Make Efficient Decisions

Make regulatory and permitting processes for development clear, predictable, coordinated, and timely in accordance with smart growth and environmental stewardship.



4. Protect Land and Ecosystems

Protect and restore environmentally sensitive lands, natural resources, agricultural lands, critical habitats, wetlands and water resources, and cultural and historic landscapes. Increase the quantity, quality and accessibility of open spaces and recreational opportunities.



5. Use Natural Resources Wisely

Construct and promote developments, buildings, and infrastructure that conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, and materials.



6. Expand Housing Opportunities

Support the construction and rehabilitation of homes to meet the needs of people of all abilities, income levels, and household types. Build homes near jobs, transit, and where services are available. Foster the development of housing, particularly multifamily and smaller single-family homes, in a way that is compatible with a community's character and vision and with providing new housing choices for people of all means.



7. Provide Transportation Choice

Maintain and expand transportation options that maximize mobility, reduce congestion, conserve fuel and improve air quality. Prioritize rail, bus, boat, rapid and surface transit, shared-vehicle and shared-ride services, bicycling, and walking. Invest strategically in existing and new passenger and freight transportation infrastructure that supports sound economic development consistent with smart growth objectives.

8. Increase Job and Business Opportunities

Attract businesses and jobs to locations near housing, infrastructure, and transportation options. Promote economic development in industry clusters. Expand access to education, training, and entrepreneurial opportunities. Support the growth of local businesses, including sustainable natural resource-based businesses, such as agriculture, forestry, clean energy technology, and fisheries.



9. Promote Clean Energy

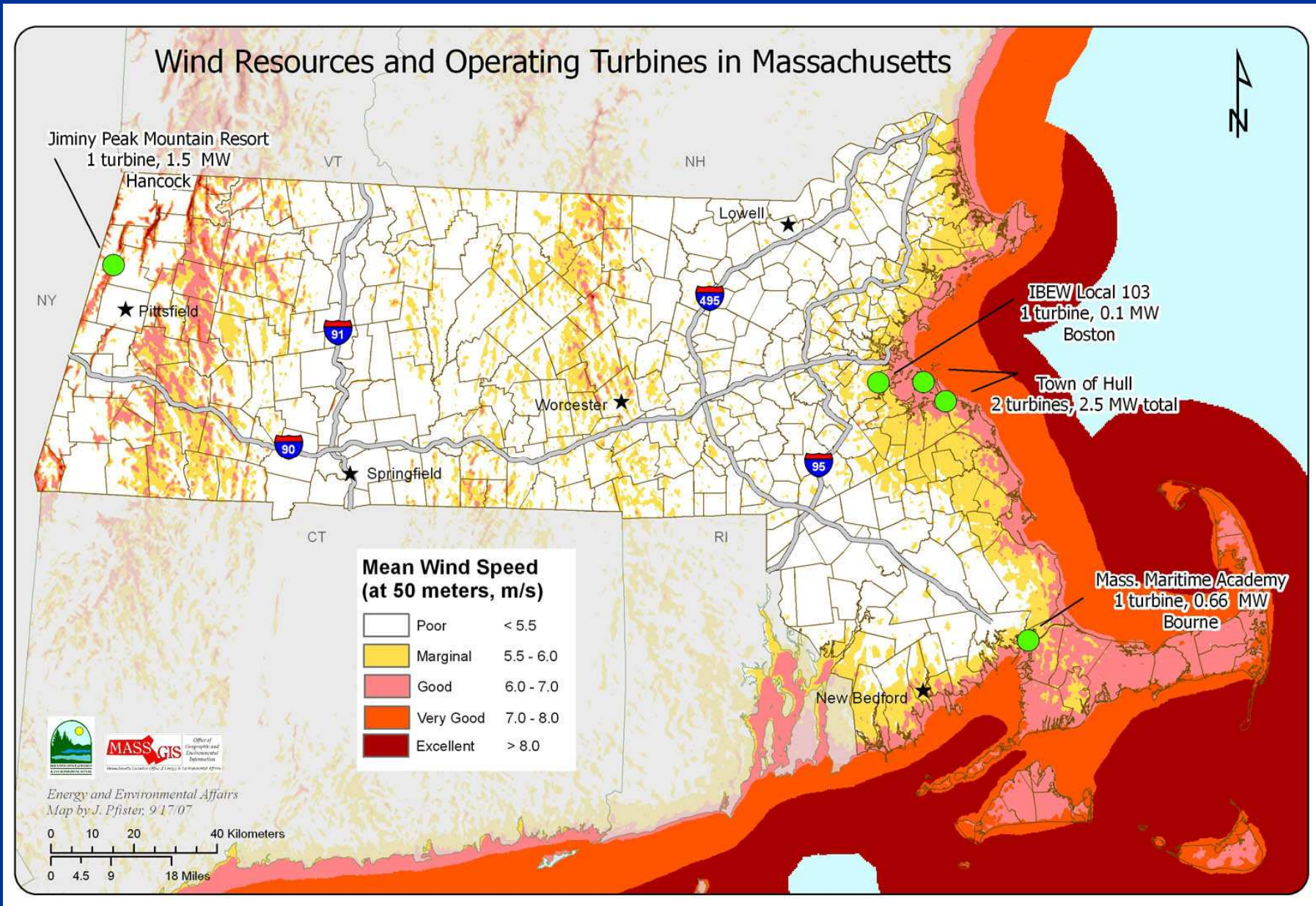
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10. Plan Regionally

Support the development and implementation of local and regional, state and interstate plans that have broad public support and are consistent with these principles. Foster development projects, land and water conservation, transportation and housing that have a regional or multi-community benefit. Consider the long-term costs and benefits to the Commonwealth.



Massachusetts has suitable locations for wind and other renewable energy technologies, but zoning rarely facilitates and often inhibits siting



Few communities have implemented regulations that require or encourage energy efficiency or green building



The Genzyme Building and Mass Audubon's George Robert White Conservation Center

Inventories of municipal energy use and greenhouse gas emissions and specified reduction targets are rare.

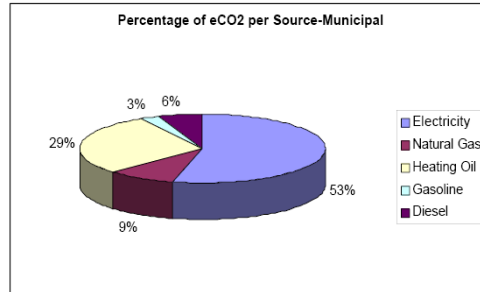
Table 1
Inventory Results-Municipal Emissions

Year	Total eCO ₂ (Tons)	Energy Use (MMBTU)	Cost
1995	19,154	168,716	\$1,658,332
1998	19,558	170,509	\$2,070,733
2010 (forecast)	19,883	165,405	\$2,317,983

Table 2
Inventory Results-Community Emissions

Year	Total eCO ₂ (Tons)	Energy Use (MMBTU)
1995	696,112	7,139,666
1998	725,795	7,384,567
2010 (forecast)	805,729	8,039,635

Chart 2



The City of Medford has completed a Climate Action Plan that inventories emissions, set targets, and specifies methods of reaching the target

Summary of Proposed Emissions Reduction Measures Municipal Reduction Measures:

Buildings

- Local Energy Efficiency Code-Municipal Buildings
- Annual Energy Audits
- Renewable Energy Sources
- Hormel Stadium Retrofit

Lighting

- Streetlight Conversion
- Streetlight Inventory
- Traffic Light Conversion
- Photovoltaic Recreational Lighting

Fleet

- Increase Fuel Efficiency and Downsize Vehicles
- Alternative Fuel Vehicles
- Support Cleaner Fuel School Buses
- Idling Policy
- Trip Reduction Program-City Hall Employees
- Bicycle Patrol Program

Procurement

- Only Energy Star or Equivalent Purchases
- Require Life Cycle Cost Analysis
- Block Purchasing of Green Energy

Master plans seldom address energy and few communities have completed climate action or other energy plans.

Climate Action Plan
Somerville, Massachusetts

Proposed by:
Commission on Energy Use
and Climate Change

July 2003

TOWN OF
GRAFTON
MASSACHUSETTS



2001 COMPREHENSIVE PLAN

CITY OF MEDFORD

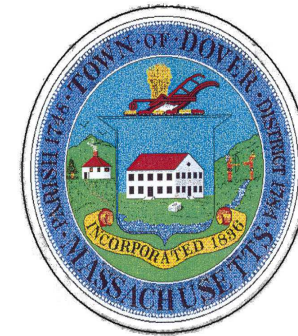


CLIMATE ACTION PLAN

OCTOBER 2001

TOWN OF DOVER

MASTER PLAN



AUTHORIZED BY:

Massachusetts General Laws; 1990
Chapter 41, Section 81D

Approved by :
The Town of Dover Planning Board

May 11, 1998

Reform Goals: Energy

Desired reforms to the planning, subdivision, and zoning statutes include incentives or mandates to:

- Produce land use plans and zoning bylaws/ordinances that reduce energy consumption
- Allow renewable and other clean energy facilities in certain districts
- Encourage green buildings

Environmental Stewardship:

- Concentrate Development and Mix Uses
- Protect Land and Ecosystems
- Use Natural Resources Wisely

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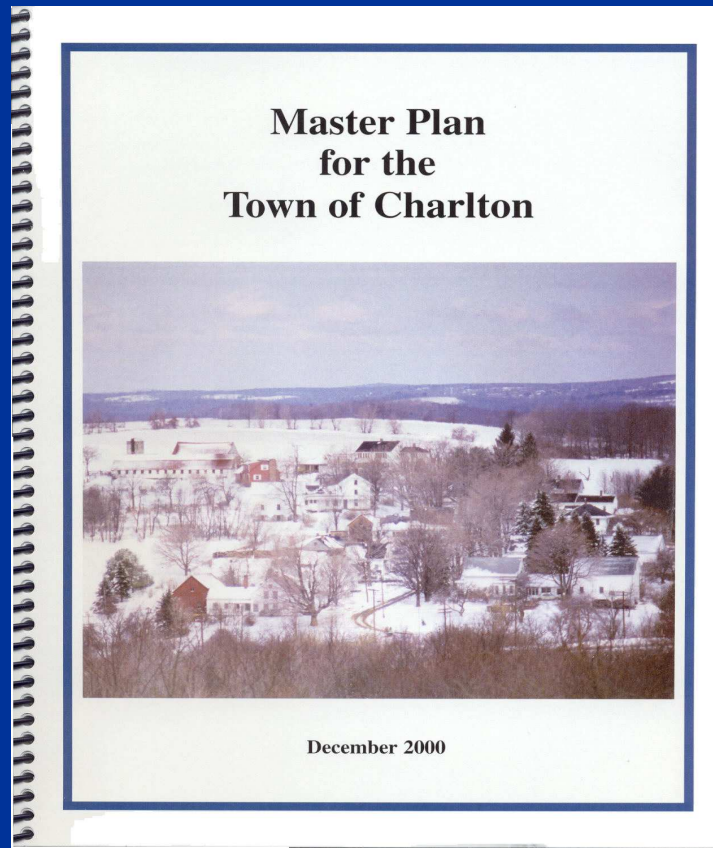
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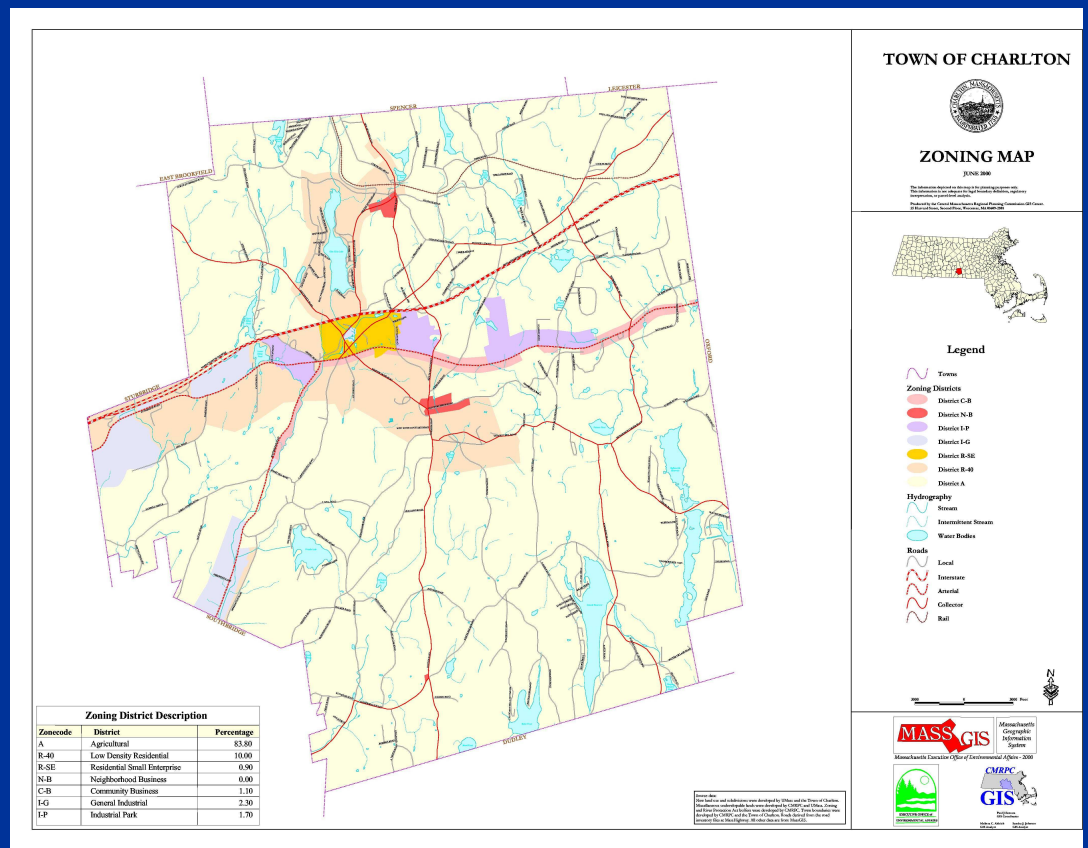
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Master plans are required,
but often not produced

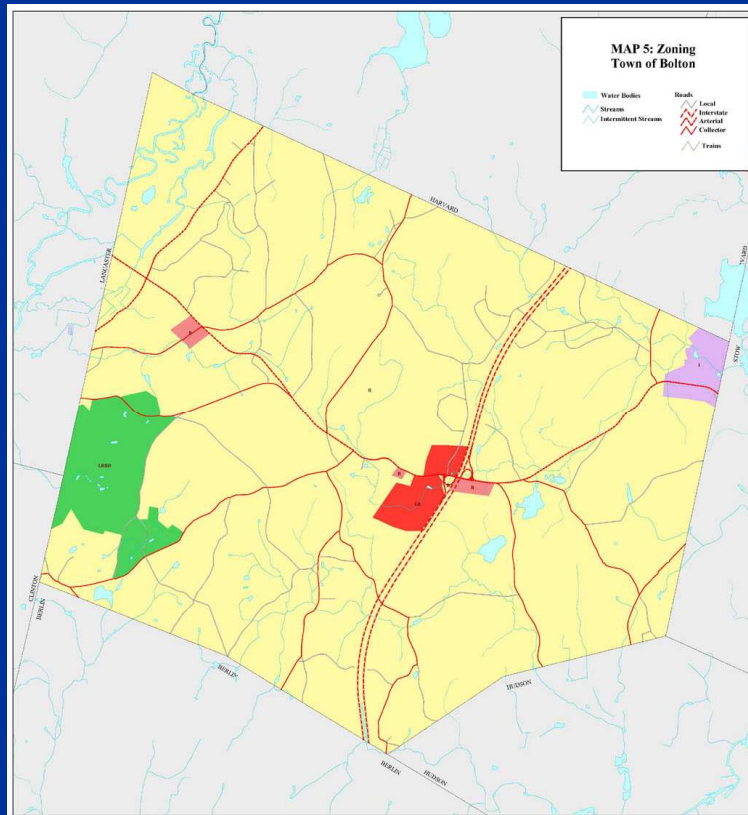


Zoning, not planning, is the legal
basis for future development

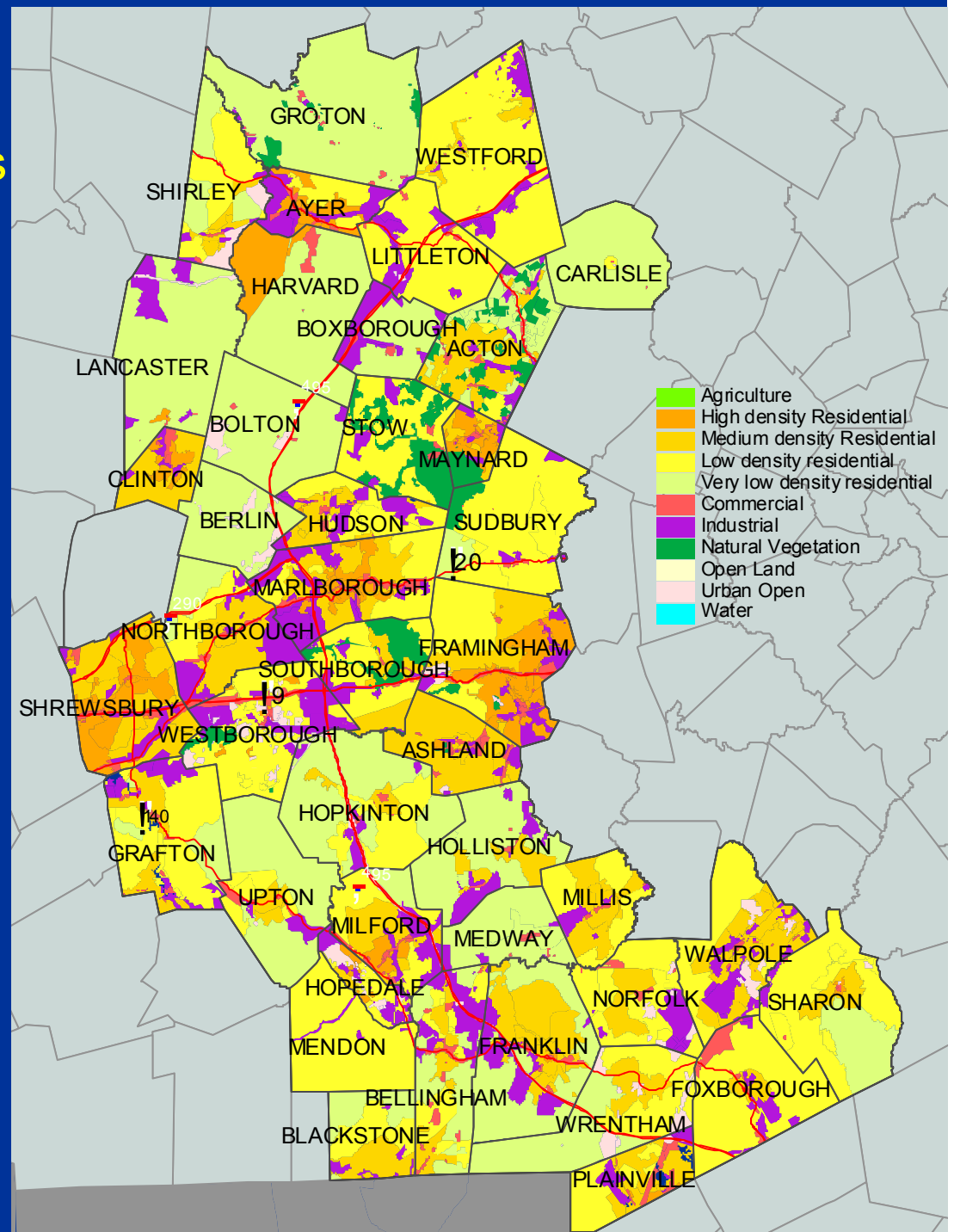


Primary Zoning Problems:

- Large land area requirements
- Single use zoning



The result on a municipal
and a regional scale



Sprawl – low density, single use, automobile dependent development



Impacts of Sprawling Development:

- Air Quality and Climate Change
- Water Quality and Quantity
- Habitat Loss and Fragmentation
- Housing Costs
- Traffic
- Workforce Impacts
- Cost
- Community Character
- Quality of Life



Open Space – Water Supply Protection



Open Space – Working Landscape Protection



Open Space – Coastal Lands Protection



Open Space – Habitat/Biodiversity Protection



Snowy Owl



Red Oak



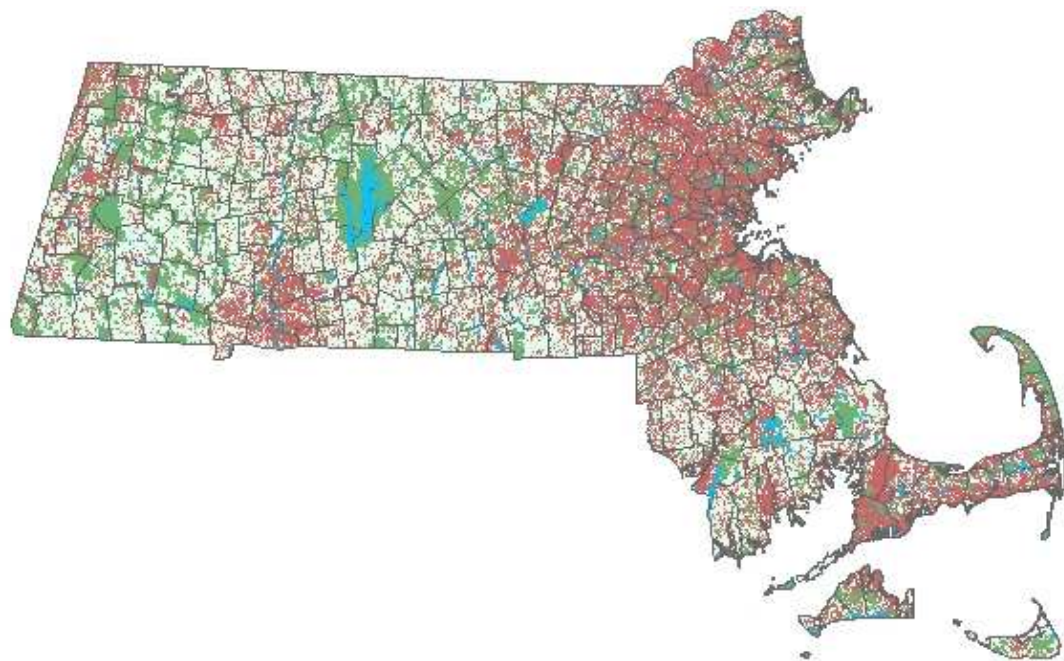
Spotted Salamander

Reform Goals:

Desired reforms to the planning, subdivision, and zoning statutes include incentives or mandates to produce master plans and consistent zoning that:

- Targets growth to appropriate locations;
- Permanently conserves sensitive land and natural resources; and
- Utilizes low impact development practices.

Conserved and Developed Land



About 2 million acres are unprotected and developable.

Areas in **red** are developed or absolutely constrained.

Areas in **green** are permanently protected.



Reforms:

Sensitive siting, reduced land consumption, higher density, mixed use, and better design through zoning that:

- Protects natural resources through agricultural or forestry zones, clustering, transfer of development rights, etc; and
- Reflects the patterns of our past: cities, towns, villages and hamlets surrounded by undeveloped countryside.

How:

- “Real” home rule within specified parameters
- Expectations and funding “up front”; flexibility as to how goals are met
- Enhanced planning and regulatory powers upon master plan approval
- Stated consequences for lack of plan implementation

Planning and Zoning Reform – Energy and the Environment

